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ABSTRACT

Qualitative or observational analysis was used in an all-Navajo Bureau of Indian Affairs day school of approximately 210 students, grades kindergarten through eighth, to generate a description of the attitudes and perceptions surrounding tests and the process of learning about testing among Navajo children. Primary data gathering occurred at the second, third, and fourth grade levels; these data included teachers' explanations of tests and the need and purpose of testing, students' perceptions and feelings concerning testing, extensive classroom observations, and individual interviews conducted with a sample of students and teachers. Data indicated that teachers and students at the lower grade levels functioned in a complimentary way although they had different models for the testing event. By presenting the proper physical behavior during testing, the students seemed to satisfy many of the requirements of the teachers' model, although the understanding of the reasons behind testing were clearly different in both groups. When teachers had to change their model in the later grades, shifting the emphasis from form to content, and when, at that time, the reality of failing presented itself more strongly in the students' school life, the students' model became dysfuntional. (Author/CM)

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FINAL REPORT

AN ETHNOGRAPHIC ANALYSIS OF TESTING AND THE NAVAJO STUDENTS

GRANT NO. N.I.E.-80-0083

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CHAPTER I

TESTING AND CHILDREN: THE PROBLEM

A. Statement of the Problem

This study is an observational or qualitative investigation of tests and test-taking among Navajo students in a Bureau of Indian Affairs (BIA) day school. Focusing on the processes involved in testing and the development of the idea of tests among Navajo students, this research places the test in the context of the world of the student and the classroom. In short, what do Navajo students think of tests, how does the idea of a test develop, and does this affect student performance? What importance do Navajo students attach to tests? How has the concept of testing been taught to the Navajo student? How do Navajo students view themselves when they learn of their test results? In this study, testing is being viewed as an "event" in a student's educational career. In anthropological terms, testing can be seen as a "rite of passage" which a student must successfully complete in order to move on to the next stage, grade, or position within the institution of schooling. How is the "event" of testing viewed by the Navajo students and does it affect their attitudes, feelings, and performance?

In the analysis of test scores, minority students, including Navajo, consistently fall behind their Anglo peers in terms of standardized academic achievement. The academic level of the students at Red Canyon, the research site, at all grades is considerably depressed when compared with national norms. An analysis of the 1979 California Test of Basic Skills (CTBS) pre-test results revealed that, taken as a school, grades two through eight, a total of 95.8% of the students scored below the national average on the total test battery. When the data are broken down by grade level, the students in the lower grades are more likely to score closer to grade level than the older students. Students in second, third, and fourth grades are generally not more than a grade level behind the norm as measured by the CTBS. When the students reach the higher grades, however, they drop further behind. By the time the student reaches the eighth grade, he or she might be as many as three or four grade levels behind, according to nationally established norms on the CTBS.

This problem, of the depressed achievement of minority students on tests, has previously been examined by two basic methods. The most frequently used method has been to examine the results of the tests themselves with a psychometric or statistical analysis of tests and test scores (Coleman, 1966: Mercer, 1972). The other method has been to examine the cultural differences of the students.

relying on anthropological data to support differences of learning styles, attitudes, and values (Cohen, 1969: Gay & Abrahams, 1973).

Both of these approaches have been valuable, but, ultimately, they do not address the basic processes involved in the actual event of testing. To clearly understand tests and testing, it is necessary to acquire a picture of the processes involved in the event of tests and testing. How does the idea of a test develop among students? What processes are involved in a student's understanding of a test? Research which starts with the test scores themselves obscures or neglects the processes the student is involved in up until he or she actually puts pencil to paper to take a test. How has a test been presented to the student by the classroom teacher? What knowledge of the event of test-taking does a student have before he or she sits down to take a test? Research which looks at a student's cultural or socio-economic background for explanations of success or failure on tests addresses the possible differences with which a student might enter the testing situation. Such research analyzes the content of the test itself as being either appropriate or inappropriate according to the student's background. Again, however, the processes involved in learning about and developing an understanding of tests and their importance in the context of the classroom experience are neglected.

This study develops a new perspective on the processes involved in the event of testing among Navajo students by using qualitative or observational analysis. Testing behavior is very complex. So far, research has emphasized the examination of only one part of this complex whole--the tests themselves and those giving the tests--to the neglect of the recipients of the tests, the students. To further understand testing behavior itself, the event of testing needs to be examined from the perceptions of the students themselves.

Academic testing is widely used throughout our educational system as a tool for measuring success and failure in school. This testing includes such professionally published achievement tests as the CTBS, Stanford Achievement Test, California Achievement Test, and the Iowa Test of Basic Skills. Also important in the testing process are in-class, teacher-developed tests. These tests are used by classroom teachers to evaluate achievement by assessing a student's content knowledge. In-class tests are also used to prepare students for formalized achievement tests. In the analysis of test scores, minority and lower socio-economic class students consistently fall behind students from the middle socio-economic class and

the majority culture in terms of academic achievement (Coleman, 1966; Harris, 1976; Jensen, 1974). Current tests are standardized on and directed to the white middle-class population, making them essentially unfair and unrepresentative of children of culturally different backgrounds (Levine, 1976). Cultural differences in motivation (Maehr, 1974; Piersel, 1977; Ruhland & Field, 1977), anxiety level (Phillips, 1971; Wittmaier, 1976), language (Harris, 1976; Hernandez, 1973), cognitive style (Cohen, 1969; Rohwer, 1971), speed and timing (Knapp, 1960; Shannon, 1975), and examiner differences (Lefley, 1975) as well as other factors, are seen as problems hindering the test performance of children from different cultural backgrounds. This research does not, however, explain why minority children start out more equal with the differences increasing the longer they are involved in the schooling process. This seems to suggest the operation of something other than simple cultural biases in the event of testing. Although research has shown inherent cultural and economic biases in tests, the use of tests as indicators and certifiers of academic success and failure continues.

Most of the research examining the issue of test bias has centered on the content of the test itself, predominantly from a psychometric or statistical point of view. To date no research among any student population has examined the "process" of testing from the perspective of the students involved in the event of testing. Are there certain lessons, skills, or attitudes, beyond the factual content of the test, which need to be learned in order to perform well on tests? For example, is frustration a necessary component in the developmental process of learning about testing? Wittmaier's (1976) research shows that low anxiety is a possible indicator of underachievement. Is the necessary motivation for success in testing lacking among certain groups of students? Rist (1978) speaks of the importance of becoming "test-wise" for successful performance on tests. How does a child become "test-wise" or "test-sophisticated"? These types of questions need to be asked in order to gain a clearer picture of the process of testing as it relates to the child from a different culture.

B. Significance of the Study

The issues raised in the area of testing and minority students have led to different approaches to studying and alleviating the inherent biases of tests. Attempts have been made to develop "culture-free" tests, to adapt present tests for cross-cultural applications, and to develop distinct tests for particular socio-cultural groups. The research by Mercer (1972) goes one step further in a psychometric study which attempts to rectify the disparity of test scores by developing a socio-cultural index creat-

ing pluralistic norms which are then interpreted along with standardized norms of the test as published in the test manuals. Although this research is important, it still focuses on the tests themselves rather than on processes and on the "actor," the student, in the event of testing. In urging researchers to view human behavior with relativism, Kagan (1967) states:

> (Psychology) should begin to focus its theorizing and burgeoning measurement technology on variables having to do with the state of the organism, not just the quality of the external stimulus. The later events can be currently objectified with greater elegance, but the former events seem to be of more significance. (p. 141)

In other words, he is arguing a need for "actor"-oriented research. The significance of the event, in this study--testing--can only be fully realized by examining the internal state of the organism, or the students themselves as test-takers.

It is the aim of this study to establish information that will help to change the one-demensional way testing is viewed and, therefore, aid in developing procedures and insights to help educators in the analysis and evaluation of their students. Hence, failure to perform adequately on a test might be connected to a failure to interpret the importance of tests in schooling, rather than simply a lack of knowledge of the content of the test itself.

An awareness of the range of perceptions and values of students from diverse cultural groups concerning testing and assessment is necessary for educators if they are to more effectively meet the needs of these students. With the information from this study, the teacher of such students might be better equipped to interpret and use tests in assessing individual performance. Although this study centers on the Navajo student, it is hoped that it will generate a new perspective on testing that will focus attention on the processes involved in testing among other minority and socio-economic groups.

Chapter One of this study has outlined the statement of a particular research problem and the data supporting the need for this kind of research. Chapter Two presents the theoretical and methodological design for the present study and describes the school setting at Red Canyon. Chapter Three covers the environment and context of the testing event which includes teacher involvement with these students: their concerns, feelings, and attitudes. Chapter Four is devoted exclusively to the students at Red Canyon: their definitions, ideas, and feelings surrounding tests and testing. The last

chapter of this study, Chapter Five, analyzes observations and interviews with the test-givers and test-takers, both teachers and students, concerning the event of testing.

CHAPTER II

METHODOLOGY

A. Theoretical Design

Although children are acquainted with evaluation of their behavior through parent approval and discipline, it is not until entering school that they face formal evaluation in the form of classroom testing. This research project examines, by ethnographic or qualitative research methods, the processes involved in the testing situation of Navajo children. It is based on data collected during a year and a half of field work in an all-Navajo Bureau of Indian Affairs (BIA) day school.

Tests are imposed on a student from "above" and this testing situation has traditionally been interpreted in an "etic" manner. This etic approach is concerned with the assessment of an outside observer, who may or may not have the same categories as the students being observed. That is, tests are given and analyzed by teachers, administrators, and researchers with little input or regard for the student's perceptions of the event. Therefore, etic statements may bear little relation to the student's notion of what is significant, real, meaningful, or appropriate. Kagan (1967) emphasizes this problem in research on human behavior which ignores the information the subjects themselves have to offer.

An "emic" approach, on the other hand, is an attempt to view the situation or event from the perspective of that group or culture. An emic approach to purposes, goals, motivations, and attitudes is premised on the assumption that, with respect to the actor and the observer, it is the actor who is better able to know his or her own inner state. Under this approach it is also assumed that information concerning the actor's inner state is essential for an understanding of his or her behavior and for a proper description of the culture or situation in which he or she participates (Harris, 1968). Emic study, according to Edward Sapir:

> helps one to appreciate not only the culture of language as an ordered whole, but it helps one to understand the individual actors in such life-drama--their attitudes, motives, interests, responses, conflicts, and personality development. (in Harris, 1968, p. 571)

The use of an emic approach in this research is, therefore, important in trying to understand tests and testing from the perspective of the student.

An example of moving from the "etic" to the "emic" approach in examining dropouts was used by Wax (1967). She

approached the problem of the dropout among the Oglala Sioux by asking the students themselves why they were dropping out rather than merely accepting previously accepted adult assumptions and research reports, which held that the dropout disliked and voluntarily rejected school. Wax's research reported that many of the dropouts stated explicity that they did not wish to leave school and that they saw themselves as "pushouts" or "kickouts" rather than "dropouts." This emic approach, focusing on the "actor," was utilized in this research to examine the process of testing and the Navajo student.

B. Research Site

The research site was an all-Navajo BIA day school of approximately 210 students, grades kindergarten through eighth, located on the Navajo reservation. Throughout this report the research site will be referred to as Red Canyon.

The community of Red Canyon is comprised of approximately 2,000 people. A large metropolitan city is located within 50 miles of Red Canyon. The average family income in the community is very low, with wages deriving primarily from work in the local mining industry, community school, and arts and crafts work at home. Some individuals commute to the metropolitan city for jobs. The school is the largest employer in the community.

The Red Canyon school was first established in the 1930's as a boarding school. In the 1960's it was converted to a community day school. Until several years ago, the school only serviced students in grades kindergarten through fifth. It has now expanded to accommodate the sixth, seventh and eighth grades, and recently was expanded further to include the ninth grade. The community is attempting to add a high school to the educational complex in the near future.

C. Data Collection

Qualitative data were gathered in a range of classrooms from first through eighth grades, with primary data gathering occurring in the second-, third-, and fourth-grade levels. These data included teachers' explanations of the need and purpose of testing, students' perceptions and feelings concerning testing, and extensive classroom observations. In addition to classroom observations and informal discussions, individual interviews were conducted with a sample of students and teachers.

To understand the event of testing from the perspective of the student, a conscientious effort was made by the researchers to word the questions to elicit emic statements rather than working them with pre-established assumptions about tests and how children respond to them. Questions were often very broad, allowing the students to describe

the event according to their own perceptions. For example, rather than, "Do you feel good or bad when you take a test?" children were probed with more open-ended queries such as, "Tell me how you feel when you are going to take a test." or "Pretend you are just getting ready to take a test in Mr. X's class. Can you describe to me how your body feels before you are going to take the test?"

It could not be assumed that the meanings of terms used by both the researchers and the students were identical. Spradley spoke of this problem in ethnography:

> Language. . .functions to create and express a cultural reality. When ethnographers do not learn the language, but instead depend on interpreters, they have great difficulty learning how natives think, how they perceive the world, and what assumptions they make about human experience . . .As a translation, ethnographic descriptions should flow from the concepts and meanings native to that scene rather than concepts developed by the ethnographer. (Spradley, 1979, pp. 20, 24)

Hence, the researchers also sought to elicit the student's own definitions of words, rather than assuming a child shared their definitions. When the child used the word "test" or "grade," the researchers probed to obtain the child's definition of the word with "What is a test?" or "Can you tell me what a grade is?" In creating a description of the testing event according to the perceptions of the children at Red Canyon, the researchers made a conscientious effort to describe the situation as verbalized by the children.

Formal interviews were also conducted with the teachers and teacher aides from the second-, third-, and fourth-grade classrooms. The questions were also worded with emic methods in an attempt to avoid assumptions by the researchers. Sample questions were: "Tell me about tests and your students." and "Describe to me what happens when you give a test in your classroom."

In discussing methodology in psychological anthropology, Edgerton speaks of using picture projection exercises: "TAT-like picture stimuli have been found useful in the investigation of attitudes, values, beliefs, and role-behavior of many sorts--all viewed as social and cultural phenomena rather than expressions of individual or 'group' psychodynamics." (Edgerton, in Narroll & Cohen, 1973, p. 341) During the second formal interview, therefore the researchers utilized a picture projection exercise. Four pictures were used during the interview, all depicting young Navajo students. (See Appendix A for pictures.) The students were asked to talk about the pictures

in general and then asked particular questions centering around tests. Students were also asked how the children depicted in the pictures would be feeling if they were taking a test and then how they themselves would feel if they were the student in the picture. This projection exercise was utilized to see if the students' "projected" statements of ideas and feelings would match or add to the information they had previously given in the first set of interviews.

Student responses from the interviews did show some variation even within grade levels. This variation was slight, in most cases, with only one or two students responding distinctly different from the rest of the students. Therefore, the researchers feel it is valid to generalize within the grade levels in describing the students' perceptions of tests and testing.

D. Research Sample

As the purpose of this research was to examine the processes involved in students' learning about tests and testing, the data gathering centered on the lower elementary grade levels. Red Canyon administers a standardized achievement test, the California Test of Basic Skills (CTBS), twice a year in grades two through eight. The CTBS is used by the school to determine grade promotion. Due to the absence of standardized testing and lack of formal classroom testing at the first-grade level, the researchers centered primary data-gathering efforts in the second-, third-, and fourth-grade classrooms.

The following charts list the population at each of the grade levels as well as the student sample used for in-depth, formal interviews. The teachers were not involved in selecting the students to be interviewed. Students at each of the grade levels volunteered to leave the classroom with the researcher for the formal interviews. As this researcher had been present in the classrooms for six months prior to the first interview, the students were familiar with her and seemed eager to participate in the interviews. Interviews ranged from ten to fifteen minutes and were tape-recorded with the students' permission. Verbatim transcriptions were obtained from the tapes. Along with the observational data these served as the data base for the research results that follow in this report.

In addition to the formal interviews with students and teachers throughout the project, the researcher informally talked to all of the students in the second, third and fourth grades as well as with some of the other students, other teachers, staff, and school administrators.

RED CANYON STUDENT POPULATION:
CLASS SIZE AND SAMPLE SIZE

SCHOOL YEARS 1979-80 AND 1980-81

Grade	Class Enrollment	First Interview Number of Students	Second Interview Number of Students
Second	26	18	8
Third	26	14	10
Fourth	23	17	16

Third Interview

Grade	Class Enrollment	Number of Students Interviewed
Second	23	5
Third	29	5
Fourth	26	5
Fifth	27	5

E. Student Academic Levels and Promotion Policy

As previously mentioned in Chapter One, the academic level of the students at Red Canyon as determined by tests is considerably low. When compared with other students, a total of 95.8% of these students scored below the national average as measured by the CTBS. However, Red Canyon, which is a BIA school, is required to follow the BIA agency regulations for student promotion. This policy restablished grade-level guidelines, as measured by the CTBS, which students have to attain before they are promoted. These levels, moreover, are rising each year in an attempt to strengthen the academic credibility of the educational program. If students, regardless of their classroom performance, do not meet the required grade level, they are retained in their present grade. The chart on the following page outlines these levels.

BIA AGENCY PROMOTION STANDARDS

Student Grade Level	Required CTBS Grade Level for Promotion	
	1979-1980	1980-1981
Second	1.9	2.1
Third	2.5	2.8
Fourth	3.1	3.4
Fifth	3.5	4.0
Sixth	4.0	4.5
Seventh	4.5	5.0
Eighth	4.9	5.4

F. The Classroom Setting

Most students at Red Canyon in each grade, kindergarten through fourth, are in the same classroom with one teacher throughout the school day. Students requiring remedial work leave their classrooms for short periods of time to work in either the Language, Reading, or Math Labs or with the special education teacher. Students in grades five through eight rotate from class to class to receive instruction from teachers specializing in various subjects such as science, social studies, physical education and health, home economics, math, industrial arts, and language arts.

Although the schedule varies slightly throughout the year, the lower-grade level students usually start school at 9:00 and spend their mornings working in the subject area of language arts. Most teachers have their classes divided into groups according to academic ability. The teacher works separately on the daily language lesson with one group at a time, usually in a semi-circle located away from the center of the classroom. While the teacher is working with one group, the rest of the class is engaged in various seat work assignments. These students are assisted by the teacher aide while the classroom teacher is working with the different individual groups.

All of the lower-grade level students have a short recess, lasting fifteen to thirty minutes, during the middle of the morning, and then they return to their classroom to continue with their language arts or math instruction. The students' lunch break is approximately one hour, and then they return to their regular classroom for further instruction in language arts or in science, social studies, or art. The students' school day ends at either 2:30 or 3:00.

Class sizes vary from 20 to 30 students. Most of the teachers at Red Canyon are Anglos, however, each classroom in all of the grades at Red Canyon has a bilingual Navajo teacher aide. Almost all of the teacher aides are Navajo men and women from the local community. In most cases the aides have worked at the school for at least five years. During the first year of this study, all employees at the school were BIA-contracted employees. Some of these employees had been with the BIA for a considerable time and many had taught or worked at other reservation schools. In the summer of 1980, the local school board gained the authority to contract its own employees for the school. All new teachers and staff hired after this time are non-BIA employees. During the first year of this research, the turnover in the staff as a whole was very high: eleven resignations throughout the year out of a staff of approximately 30 people.

In each of the classrooms, the teachers have attempted to create a pleasant environment for their students. Blackboards are decorated by the teachers and teacher aides and changed at least once a month. The classrooms are small, but teachers try to provide an area in which the students can move away from their desks and sit and read or play with educational games. Some classroom materials are chosen by the teacher and purchased through the BIA agency, but the school administration has chosen the main language arts curriculum. This consists of two different reading programs: both are designed especially for the non-native, English-speaking student. Although the students are all Navajo, there are very few bilingual or bicultural classroom materials. The students are repeatedly encouraged to speak English and are frequently scolded or lose classroom tokens (which can be exchanged in the class store for school supplies and prizes) for speaking in Navajo.

G. Observations

One of the researchers spent most of her time during the year and a half of field work observing the daily activities in the second-, third-, and fourth-grade classrooms. In each of the classrooms, a location was chosen from which she could clearly see the students at their desks while at the same time maintaining the least disruptive position possible. In the second-grade classroom the researcher sat next to the pencil sharpener. This area of the classroom removed her from the center of the class while at the same time allowing her constant contact with the students. The pencil sharpener is a popular and busy location in the classroom and have the researcher the opportunity to talk informally to all of the students on a regular basis. In the third- and fourth-grade classrooms, she sat to the side of the classes, next to the spelling grade chart.

Because students frequently visited the spelling chart to count their stars for perfect performance, the researcher was also able to talk informally to the students in both of these classrooms. In all of these classes, when the teacher was working with the individual morning reading groups, the researcher moved around the room talking to and assisting the other students with their seat work. This enabled her to establish rapport with the students as well as to assist the classroom teachers and aides.

Because this was an emic study--seeking students' perceptions of events they encountered in school-- the researcher spent recess and lunch on the playground with the students. Students became very familiar with her and responded to her as a friend rather than another teacher, often questioning her as to where she was when she was not at the school and sharing their problems with family, friends, and rivals.

It was only after observing the classrooms and school for six months that the questions and ideas to be explored during the formal interviews were formulated. The most important questions of the entire research, in fact, grew out of a gradual realization that there was a game-like atmosphere among the younger students during the testing event and an open excitement and lack of anxiety surrounding tests. Among the older students, the testing situation seemed to be different. Rather than asking the students about this difference she was observing, the researcher posed the questions during interviews in a very open way, asking the students to define and describe tests and testing in their own words, with their own ideas as to what was happening and why it was happening. The results from these formal interviews served to generate more questions and ideas which were then used to continued informal dialogues with the students on the playground and in the classrooms.

H. Research Limitations

This study examined the process of testing and the development of the idea of testing at one school attended by only one group, the Navajo. Generalization to other ethnic groups or to Native Americans in general cannot necessarily be assumed. This research has produced a description of how these particular Navajo children responded to testing and assessment in the classroom. The researchers felt a detailed, concise description of only one group, in this case the Navajo, would serve to produce a provocative, exploratory study which could then be utilized as a basis for further research in this area. However, since this study did not involve another group and, since the variations within most ethnic groups are considerable, the researcher cannot necessarily state that these responses are particularly

"Navajo" or that the responses are "different" from those of children from other socio-economic or ethnic groups. This situation does not invalidate the reported findings but rather limits them to and places them within the context of the research site: a small, rural, Navajo community school. Rather than limiting the significance of this study, therefore, the findings support the need for further research among other groups on the area of student perceptions surrounding the event of testing.

CHAPTER III

TEACHERS: TEST-GIVERS AND THE ENVIRONMENT OF THE TESTING EVENT

Test-taking for the students in this study occurs in the environment of the classroom under the direction of the classroom teacher. This chapter describes this environment as verbalized by the teachers and from researcher observations. What occurs in the classroom environment with the teachers places the students in the context in which they experience the event of testing. The students' perceptions, ideas, attitudes and values can then be examined in the environment in which they occur.

The teachers and teacher aides were interviewed with questions focused on how they presented tests to their students; how their students responded to in-class testing; and how they themselves interpreted their students' feelings concerning tests, assessment, and grades. Like those for the students, the questions were worded in an attempt to avoid assumptions by the researchers and were often very broad, allowing the teachers and teacher aides to describe the testing event according to their own perceptions. Interviews were taped and later transcribed verbatim. A total of seven teachers and three teacher aides were interviewed. These interviews included the second-, third-, and fourth-grade teachers and their aides, as well as the upper-grade level math, social studies, science, and language arts teachers.

Throughout this study, the teachers are broken into two groups: the lower elementary, which includes second, third and fourth grades, and the upper elementary, which includes all of the departmentalized teachers working with the students in grades five through eight. Most in-depth observations occurred in the second-, third-, and fourth-grade classrooms, and these teachers are often referred to separately in this study. The teachers in grades five through eight are collectively referred to as the "upper-grade level teachers." A researcher spent time observing in all of the teachers' classrooms, and teachers at all levels were observed giving in-class tests to their students.

A. An Ideal-Typical Model of Testing

Teachers, school administrators, and test developers all seem to carry around in their heads an "image" of the testing situation, which is apparently different from that of the students in this study. This "image," which comprises tests as a mode of scholastic evaluation, can be seen in terms of an "ideal-typical" model of testing. The "ideal-typical" model, as outlined by Max Weber (1947), is introduced here for the purposes of examining the specific event of testing. According

to Weber, an "actor" does not merely respond to stimuli but makes an effort to conform to certain "ideal" rather than actual patterns of conduct. As Weber says,

> The construction of a purely rational course of action . . . serves the sociologist as a type . . . . By comparison with this it is possible to understand the ways in which actual action is influenced by irrational factors of all sorts . . . in that they account for the deviation from the line of conduct which would be expected on the hypothesis that the action were purely rational. (Weber, 1947, p. 89)

This model will be used to convey a picture of what the teachers believe should occur in an "ideal" testing situation. The data from this study can then be examined and analyzed according to how well this information fits or differs from this "ideal-typical" model.

Schooling as an institution in our society is an accepted, even integral, part of child development. Even though a child is receiving an education at his or her home prior to entering school, the school is seen as the major formal educating institution in our society. Progress in this institution is measured either by teacher-developed tests or standardized tests. Isolated schools have tried to abolish tests or modify testing formats but tests, in varying forms, remain the primary tools of assessment in our schools.

In the "ideal-typical" model, tests serve three functions: to give the teacher an objective measurement of the students' progress in the classroom, to give the students an instrument to determine what they have and have not learned in the classroom, and to give the school an overall measurement of the students' progress in the school. The school can utilize test results to determine areas of instructional strengths and weaknesses. The teacher can utilize test results to determine knowledge students possess and areas in which students need further assistance. Students can utilize the results of their tests for seeing what they have learned and what they still need to learn. In this ideal model, a test becomes an instrument for judging progress and providing assistance to rectify a lack of knowledge.

Tests are presented to students by their teachers. In the case of major standardized tests, a person other than the regular classroom teacher may administer the test. However, the test is an activity that emanates from and under the direction of the classroom teacher. In this ideal model the classroom teacher would explain the importance of the up-coming test to the students. This information might include a statement that the test is an important activity to assess what the student does and does not know. The teacher might also advise the students to try as hard as they can on the test. Along

with this instruction as to the significance of the event of testing, the teacher would also instruct the students as to correct test-taking behavior. This information would include the rules of test-taking, such as no talking, cheating, or excessive body movement. The teacher would explain why this behavior is important, given what a test is supposed to be. The rules surrounding the physical requirements of test-taking may vary in minimal ways from teacher to teacher. Some teachers require student desks to be separated when taking a test while others may require students to physically cover their papers to avoid cheating or copying. Within these variations, the message to the students is the same: during a test, one does not look at another student's paper, talk, or move one's body in any excessive way for a test is an instrument for measuring individual progress.

In this ideal model, students would already be familiar with testing as a part of schooling. These students would readily understand and accept tests as a necessary part of the schooling process. This knowledge might have come from older brothers and sisters who themselves have learned of the importance of tests from their own experiences. Parents, having accepted the importance of schooling and success as determined by tests, might also transfer this knowledge to their children prior to the child's entry into school. The child who comes into the schooling experience with a prior understanding of the importance of tests for success in school might approach the testing event with more seriousness and less confusion than a child without this information. The child who enters school with a lack of this understanding might more readily approach a test as simply another activity or event that has a distinct set of rules.

As the child, following the ideal-typical model, accepts the importance of a test in his or her school experience, there is a desire to perform well on tests. As the child strives to achieve, he or she develops a measure of concern when confronted with taking a test. The child is aware of the significance of testing and may exhibit, in varying degrees, concern and anxiety when performing on a test. The reason for this unease might be connected to an understanding that this event is a judgment of personal self-worth and achievement, and that teachers and parents will judge the child according to his or her performance. For the child that does not understand the importance of tests in school, anxiety or concern when taking a test might be considerably lower than that for a child with a formal understanding of testing. This child might approach taking a test with less pressure or anxiety due to a lack of understanding of the consequences of test failure.

These elements of the "ideal-typical" testing situation represent an "image" of the significance of testing for teachers. The teachers and administration at Red Canyon seem to function on this "image" of testing and assume their students share this understanding of testing.

B. Teacher Presentation of Tests

All of the teachers were asked, "Can you describe what happens when you give a test?" and "Can you tell me how you present a test to your students?" They responded with a description of their directions to the students before a test. In all cases the teachers recalled having given technical, procedural, or "how to" instructions to the students. This pre-test information covered the "do's and don'ts" surrounding proper test-taking behavior, such as no talking, no cheating, and the removal of all materials from the students' desks. The third-grade teacher described her instructions to the students:

> It is now time for us to take the test. So we're going to take the test within a matter of minutes and you have maybe five or ten minutes to review your notes. Everything must be put away. You should have out pencil only and eraser if you need it. From there we may review how to take the test. For instance, if it is a multiple choice test, then I'll explain to them that there are three possible answers, and they should select only one. Once I begin the test, no talking allowed and we proceed from there.

Lacking in all of the teachers' responses was any explanation of why the students were taking the particular test, the significance of the test, or any verbal encouragement to the students to try to perform well on the test. Although teachers did indicate that they were concerned about the students' performance on tests and in turn tried to help the students to achieve well on tests, this area of information was not mentioned when describing their presentations of tests to the students.

Classroom observations of testing situations confirmed the absence of any information other than that surrounding proper physical or technical behavior during test-taking. Although teachers varied as to how the class was organized during the testing event, teachers were observed to be consistent in the information they provided to the students before test-taking. This information included the proper labeling of the test paper and rules surrounding cheating or copying and talking. Absent from most of the testing situations observed was the transmission of knowledge to the students by the teachers which might lead to the understanding of the "why" or significance of the test they were about to take. It seemed to be assumed at all levels that the students understood <u>why</u> they were taking tests and therefore needed only information as to <u>how</u> to take tests from the teachers. The following description of an observation during a weekly spelling test illustrates this emphasis on the technical aspects of test-taking:

The teacher wrote each of the ten spelling words on the board for student review. The teacher and class would recite a word which was then erased. The students would then repeat the erased word and spell it from memory. This procedure was repeated with each of the ten words. The teacher then passed out pre-cut half sheets of paper for the test, asking the students to take out their pencils. Teacher: "Put your names on your papers," as he walked around the room checking to see if each student had properly labeled his test. Aide: "No spelling words are to be on your desks." Teacher: "Number your papers one to ten. This is a test. This means you are not to look on someone else's paper. If (aide) sees anyone looking at another paper we will take your paper and tear it up and throw it away in the wastepaper basket, and you will not be allowed to go to recess but instead will have to stay in the room and take the test. Does anyone want to stay in during recess and take the test?" Students: "No!" The teacher and aide continually walked around the classroom during the test reminding the students to keep their words covered. The students appeared very protective of their papers at times, although they frequently strained to examine each other's papers and at the same time expose their own papers. At the conclusion of the test, one student at each of the tables picked up the spelling test papers and gave them to the teacher aide. (Researcher Field Notes, 1980)

Absent from most observed testing situations, such as the one described above, was the transmission of any formal information as to the importance or significance of a test.

C. Labeling the Testing Event

The use of the label "test" to define the classroom event varied from teacher to teacher. Generally, the second-, third-, and fourth-grade teachers used the word "test" to designate the event as different from other classroom activities. These teachers sometimes used the word "quiz." However, they all felt the two words were interchangeable to the students and carried the same meaning for them. When asked about the students' responses to the use of the word "quiz" rather than "test," the third-grade teacher said, "They don't get upset or anything, it doesn't faze them at all. It's just another class of work." When asked how the children differentiated regular classroom activities from a test, the second-grade teacher responded, "Well, to me, I think a test to them is what the teacher says it is. If the teacher says that we are going to take a test, then I think they think that we are going to

review something that we have already done before." The third-grade teacher aide indicated that the students identified a test as occurring, "at the end of the week, whereas quizzes and regular classroom lessons occur during the rest of the week." In general, the teachers in the lower-elementary level used the word "test" with their students to identify an activity that frequently occurred at the end of the week, during which time students were not to talk, look on each others' papers, or have other materials on their desks.

While the teachers at the lower-elementary level did not hesitate to use the word "test" to define the classroom activity, the teachers in the upper-grade levels utilized other terms to define the event. The reasons for the avoidance or limited use of the word "test" centered around either the attempt to alleviate students' supposed test anxiety or to assure adequate attendance on test day. An upper-level teacher admitted avoiding use of the word "test" in an effort to eliminate the anxiety she felt the students would have if they identified the event as a test, "Sometimes I call it an 'activity.' It depends on what the test is about. When we do that, I might say 'We are going to do this activity now,' and I'll show them cards and all that. So it really depends; if it's a paper and pencil type thing, they can figure it out." Another upper-grade level teacher also expressed concern and attempted to play down the fact that the event was an assessment of the students.

> I don't try to put pressure on them and say, "This is a test, you had better shape up!" But I try to let them know that this is important, that "No matter what you do in here, it is very important to me what you are doing," and that "If you don't try, nothing is really going to happen."

One teacher, at the fourth-grade level, expressed concern that his lack of emphasis on the word "test" in order to protect the students might in fact be resulting in poorer student performance.

> I hate to say this, but I am probably as guilty as anyone else. They're from a minority group background, and I don't place a lot of emphasis on tests, and I think the kids pick this up from me, and they probably don't do as well on tests as they should because they know that I really don't place that much emphasis as far as a grade is concerned. I just tell them ahead of time that they are going to have a test, and then when the day comes, I present some examples for them and then I give them the test and I grade it and we go over the answers. When they don't

do too well, I try not to get down on them. I tell them that they made the mistakes. I go over the mistakes, but I'm not going to jump all over their cases.

The teachers in the second, third, and fourth grades generally presented the assessment event clearly to their students as a "test." The event, which was identified to the students as a test, was further clarified as a time in which talking was not permitted, all other work had to be taken off their desks and students had to do their own work. Generally absent from teachers' presentations of tests was non-technical information, or explanations of the significance or importance of the event. The teachers at the upper-grade levels differed from the lower-grade level teachers in their presentation of tests. The upper-grade level teachers, in response to perceived student anxiety surrounding testing, tried to minimize the importance of the testing event to alleviate the student's apprehension towards test-taking. Some concern was expressed that this lack of emphasis on tests and testing resulted in a lack of seriousness on the part of the students towards tests. Although the upper-grade level teachers occasionally expressed the importance of tests to their students, their instruction and presentation of tests focused on the physical behaviors that were and were not appropriate during test-taking.

D. Home Influence

Teachers at all grade levels continually expressed concern over their students' lack of academic achievement. There was a general consensus among the teachers interviewed that, whereas the younger students did express concern over grades and tests, the older students exhibited little concern over grades, tests, and school in general. In attempting to explain what they felt was the reason for this lack of concern, the teachers all focused on the homes and families of their students.

The teachers felt the parents, themselves having little formal education, did not necessarily see a need for schooling and, therefore, passed this attitude on to their children. As one teacher explained, "I blame an awful lot of it on parents and maybe too much, I think, but there is no support for an education in most of the kids." Homes with educated parents were seen as giving encouragement and support for schooling, but this type of home situation was not in the majority at Red Canyon.

Parents who have very little formal education were seen as caring very little about their children's involvement with the community's school. The fourth-grade teacher felt the students at the top of his class did get encouragement from their parents, were more attuned to Anglo culture, and often thought about going on to college to get a better job. As for the rest of the students in his class, "Ninety percent of the kids,

they hear their parents say, 'Well, I only went to the third grade, and it hasn't hurt me. I eat every day and I have a couple of sheep and I have some cattle, I have a home, so what's the big deal about school?'"

E. Teachers' Evidence for Students' Disinterest in School

In formulating the opinion that the students' lack of motivation in schooling was tied to the parents' lack of support for schooling in general, the teachers continually cited the students' physical treatment of their test papers, homework papers, and report cards. Test papers were quickly thrown away, homework papers lost, and report cards returned to the teachers without parent comments. This physical abuse of the "objects" of schooling was seen by the teachers as evidence of a lack of valuing or appreciation of education. Students at all grades were described as not caring about their school work because they quickly discarded their papers. This behavior was described by an upper-grade level teacher, "Some of them take their paper and immediately, as soon as they get it, they crumple it up and they are ready to throw it away. It can be any grade, it doesn't make any difference to them." Another teacher talked about the behavior of throwing away papers as an indication that the students did not care about grades or school:

> The reason I said that is because, like I'll return papers with grades on it, and if I pass it out during the first of the class, I spend the next ten minutes getting them all to sit back down 'cause they've all walked to the trash can to throw papers away, whether it is an "A" or an "F." They do not take papers home.

The teachers assumed that, because their students so easily discarded and destroyed their school papers, they did not value or appreciate schooling in general and disregarded the importance of tests in particular. However, this was based on the assumption that the students actually understood the papers, tests, and report cards as "products" or "evidence" of an important event that had occurred in school. It might be that the students did not share this understanding of the importance of these "events" as representatives of personal progress in school. Students might also not understand the grades attached to these "products" as important or significant. This would more clearly explain their apparent disregard for their various papers. The students' lack of understanding was clearly illustrated when the researcher talked to the second-grade teacher. He complained that the students did not respond in any way when they received their report cards. When asked about the method of recording grades on the students' individual report cards, he explained that they did not correspond with the types of grades he normally gave in class, which were usually in the form of a percentage

score or "minus X numbers." The recorded grade on the report card was standardized throughout the school and appeared in the form of a letter grade. When asked if the students understood the grades on the report cards, the teacher paused and admitted that he had always assumed the children all understood letter grades. He had admitted that this possible lack of understanding could be a factor in the students' apparent lack of interest or enthusiasm when receiving their report cards. Students were used to receiving grades in the form of percentages with stars, tokens, or funny face stickers as rewards for their academic achievement. The plain, formal-looking report card, void of any stars or embellishments, might seem unimportant to the student.

Not all of the students have difficulty understanding the marks they receive on their papers. Fewer older students have this problem as they progress in school. However, it does indicate that some students do not share the same understanding of a grade and classroom activity or event as does the classroom teacher. The students' careless handling of their papers might, therefore, be connected to a lack of understanding of the event or grade, a misunderstanding which would carry over to the product of that event: the work sheet, report card, or test paper.

In general, the teachers all felt the students failed to value schooling in general and grades and tests in particular. However, they say that this situation seemed to develop as the students progressed through the schooling process. According to teacher interviews, the lower-level students did seem to express more concern over grades and generally seemed more eager and open to participate in the school's activities. The younger students expressed excitement over the prospect of taking a test and were often eager to examine their graded papers. The older students approached tests with seeming apathy and were quick to discard the products of their classroom work.

F. Rewards: Teacher-Developed Motivation

Teachers at all grade levels were aware that testing situations could often produce anxiety and discomfort among their students. Therefore, they tried to alleviate stress as a testing situation approached. For example, teachers in the upper-grade levels often avoided the use of the word "test" in the hopes of reducing test-related strain. Teachers in the lower grades, however, were faced with students who did not necessarily express concern or discomfort when presented with a test. These teachers, in an apparent effort to encourage and prolong their students' comfort in relation to test-taking, and to make the classroom situation more pleasant, utilized a token or reward system in classroom testing. They attempted to de-emphasize the test as a serious event in order to "protect" the students and, therefore, make it easier for

them. Students in the second, third, and fourth grades got different colored stars attached to classroom charts for good performance on spelling, language, and math tests. Students were aware that, if they scored a certain level on the test, they would be rewarded with stars or stickers next to their name. The use of stars for motivation to perform well on the weekly spelling test did seem to create excitement and interest on the part of the students. The testing event therefore became "game-like" with an anticipated reward for successful completion.

As the students move from the self-contained classrooms of the elementary to the upper grades they experience a different presentation of tests. The token, sticker, or star system is no longer utilized. The fifth and sixth graders exhibit an increased amount of frustration when taking tests. The seventh and eighth graders exhibit what the teachers describe as "apathy" when presented with a test. Teachers are frustrated by their students' poor academic performance and respond by trying to mask or eliminate assessment as a major component in their classrooms. In trying to describe the change in the students, the second-grade teacher says,

> They [the older students] start going from the little pre-school kids into adolescents and there's more pressure on them there. They know they are not doing as well in school and I think that they get discouraged because they can see that they're not doing that well and that the interest does drop off. They understand a little bit more of what is going on and you can't fool them.

This implies that the teachers think the younger children can be "fooled" into believing that they have succeeded and are doing well with the use of stars and tokens. These students are still behind in grade level, but they move through the lower grades experiencing the event of a test much as a game with an anticipated reward. It is only when the student moves further up in the schooling process that he or she is confronted with the seriousness of tests and assessment for promotion within the institution of school.

The teachers at all grade levels operate with the underlying assumption that the children do not value their school experience and look to the home environment as a reason for this attitude. In an attempt to create motivation that will result in a student's positive attitude towards academic achievement, the lower-elementary teachers utilize a classroom token or reward system. The young children respond well to this and approach classroom testing eagerly in the hopes of acquiring additional stars or tokens. Very few of the students, however, seem to transfer their desire to obtain the rewards to the desire to obtain good grades. As the students

progress in school, they learn the seriousness of tests as devices for promotion. The reward becomes moving to the next grade, and test failure results in retention in the same grade. It is then that the students realize that tests are more than games or events to participate in and complete to gain rewards. The game-like atmosphere surrounding test-taking disappears and the student must then try to understand the testing event as a serious activity that can result in failure to progress through school with one's classmates.

G. Teacher Accountability and Tests

Red Canyon, which is a BIA school, is required to follow the Eastern Agency regulations for student promotion. This policy establishes grade-level guidelines, as measured by the CTBS, which students have to attain before they are promoted. A chart outlining these levels appeared in Chapter Two of this study.

If students, regardless of their classroom performance, do not meet the required grade level, they are retained in their present grade. By the time the students have reached the fourth grade, they are clearly aware that the CTBS is a test they must take in order to move to the next grade. Students are anxious as they prepare to take the CTBS and are continually reminded by the teachers that they must pass the test in order to pass their present grade.

In addition to the obvious anxiety this placed on the students, the teachers are also acutely aware that their performance as teachers is being measured by how well their students perform on the CTBS. Teachers are reminded by the administration that they are held accountable for their students' performances and that pay incentives also might depend on their students' scores. The implications of student failure on the test also extend to perceived teacher failure. As one teacher admits, "I think it is a very biased test against these children, but the name of the game seems to be accountability so we are stuck with the test." Teachers admit that, in an attempt to help the students prepare for the CTBS, they often end up teaching for the test, rather than teaching locally-relevant materials for the children's benefit. At the encouragement of the administration, the teachers alter their classroom tests to more clearly match the format of the CTBS and utilize a publication, "Scoring High," published by the developers of the CTBS, to assist the students by familiarizing them with the format of the CTBS. In explaining how he tries to organize his tests to help prepare the students for the CTBS, an upper-level teacher says,

> I think they need the experience of taking multiple choice tests, especially the kind where there is an answer that will say none of the answers are right or all of the other answers

are right because they are going to be running into these kinds of tests, so I guess you could really say that as well as test the knowledge, I try to test how to take the test.

In general, the teachers are very frustrated with the use of the CTBS as the sole instrument for determining advancement. They say that too much emphasis is placed on a test they feel is content-biased against these students. They also feel the pressure that is placed on them as classroom teachers to produce students able to successfully pass the CTBS. In discussing the frustration of the needs of his students and the reality of the CTBS, one teacher stated, "So we are faced with that dual dilemma there. We can serve them with the material or we can serve them with the test at the end, and of course we are concerned with the test at the end."

H. Teachers' Models of the Event of Testing

This chapter described teachers' presentations of the testing event at Red Canyon. This information constitutes models of testing from which the students learn the proper behavior to exhibit during testing and from which they develop an understanding of what a test is. In general the teachers implicitly function with an ideal-typical model of testing--tests as evaluation measures--in which tests are important events for students' personal assessment and future success. However, the teachers at Red Canyon seem to be also functioning with two distinct models of testing, other than the ideal-typical model, when presenting the event to their students. The in-class, teacher-prepared, tests are presented as game-like events. The school's standardized test, the CTBS, is presented as a serious event for promotion. Although the teachers utilize the same labels for the two testing situations, the students receive explicitly different information from the teachers when encountering the classroom test and the CTBS.

Throughout all grade levels teachers are consistent in the information they provide to the students before in-class test-taking. This information includes the proper labeling of the test paper and classroom rules surrounding cheating or copying and talking. Absent from most of the in-class testing situations is the transmission of knowledge which might lead to the students' understanding of the "why" or significance of the test they are about to take.

Teachers in the lower-elementary grade levels present their in-class testing situations to the students as game-like events. This appears to be in an effort to encourage and prolong their students' comfort with respect to test-taking and to make the entire classroom situation more pleasant. The teachers construct a reward system around in-class testing: students know that they will be rewarded with tokens or stickers if they play the "game" correctly and accurately, following

the proper classroom rules of the event. The in-class testing event as presented to the students by the teachers becomes one which is surrounded by student excitement, anticipation, and interest rather than apprehension and nervousness as the students perceive the event as a game, rather than a serious assessment.

The teachers in the upper-grade level present their students with a different model of testing. This model is one which is utilized for both in-class testing and the standardized CTBS: tests as a serious evaluation for promotion within the school system. The teachers still utilize the standard rules which have been used earlier in the students' school experience: no talking, cheating, or excessive bodily movement while taking a test. However, the testing event is presented to the students as a serious activity, not surrounded by a token or reward system, in which failure by the students means retention in the same grade. This new model--testing as an evaluation event for promotion--seems to be utilized by the teachers because of the school's promotion policy and due to teachers' professional ethics and their accountability for student performance.

The two groups--teachers and students--approach the event of testing with different perceptions or models of its purposes and importance. However, these differences are at least partially resolved due to the students' adherence to the required physical test-taking behavior. Both this partial compatibility and the underlying disparity between the teachers' and students' models will be more closely examined in Chapter Five.

CHAPTER IV

STUDENTS: THE TEST-TAKERS

The primary focus of this research is to describe the development of the concept of "test" in students' minds. It has therefore been imperative to confer with the students themselves to gather this information. Utilizing ethnographic or qualitative methodology and an emic approach to the research problem, the researchers have attempted to "get inside the students' heads" to find out what they know.

This chapter defines and describes the event of testing as verbalized by the students to the researchers. A picture is presented here of how the students themselves view, define, and feel about tests. In short, what is presented in this chapter is the "image" of testing in the minds of these Navajo students. As this report is an analysis of the entire projects research findings, a concise summary of the student's responces are reported here. Further detailed student statements can be provided upon request.

A. What is a "Test"?

The students in this study spoke English with varying degrees of proficiency. It therefore appeared that the children were using a language identical to that of the researchers. However, semantic differences do exist between the actor and the observer, and they have a profound influence on ethnographic research (Spradley, 1979). A child may be utilizing a word correctly in the context of the classroom or peers, but the child's definitions may not be identical with that of the teacher or researcher. In order to understand the events of the classroom as perceived by the child, it is necessary to obtain from the child the meaning of the words he or she is using.

When the word "test" is used by a teacher, the teacher has a predefined, professional knowledge of what that word means. The child that is entering the classroom for the first time is presented with concepts and words foreign to him or her and must develop an understanding of them in order to function in this new environment. The child is confronted with the use of the word "test" very early in his or her schooling and over the years develops a definition or concept of the idea of a test that includes the importance of taking a test in school. This concept may or may not conform to the teacher's or school's definition of the purpose and significance of testing and assessment. To clearly understand how children learn about tests and testing and develop an understanding of the significance of this event, the researchers asked each of the second-, third-, and fourth-grade children interviewed, "Can you tell me what a test is?"

In general, second-grade responses to "Can you tell me what a test is?" centered on vague descriptions of placement of desks during tests, location of test materials on the various classroom blackboards, and on the teacher as the individual one had to listen to during a test. A clear summary of these factors surrounding the actual test as a definition of a test was expressed by one student, "It is when the paper is in half (spelling tests are taken on one-half of a sheet of paper) and you put the words from the board and listen to the teacher." Absent from the second-graders' responses was the mention of any formalized, standardized test or of the significance or importance of tests for assistance in learning.

The responses of the fourteen third graders to the same question, "Can you tell me what a test is?" more clearly indicated they saw a test as a distinct event. They also articulated the "rules" surrounding the test-taking event. The students in fact often used the rules expressed by the teacher during a test as a definition for a test. Frequent responses were, "You don"t talk when it's a test. And you don't scribble on the test"; "You don't do it with someone else. Don't talk"; and "Not to copy, work."

The responses of the eighteen fourth graders to the question, "Can you tell me what a test is?" centered around the consequences or promotion aspect of a test versus a description of procedural rules occurring during test-taking. Very few students described the testing event in terms of "rules" or proper behavior as did the second and third graders, but rather expressed an awareness of the importance of tests for promotion to the next grade. Over half of the students responded by defining tests as something one had to take in order to pass to the next grade. At the fourth-grade level, then, the outcome of a test was used to define testing rather than the teacher-directed processes one went through in taking a test.

In summary, the second and third graders' definitions of a test described the testing event as an activity that is delineated from other classroom activities by its distinct behavioral rules. These students' model of a test excluded the mentioning of standardiz-d exams as tests or of the significance or importance of tests for learning and grade promotion. The fourth graders' definitions of tests, however, represented a different understanding or model of a test. Unlike the second and third graders, these students' cumulative school experiences with respect to testing situations and their consequences had apparently led them to develop a model of tests in terms of a standardized test and grade promotion.

B. How is the definition or concept of a "Test" formed?

The child's concept of the instructions leading up to and during test-taking was acquired by asking the questions, "Can you describe what happens when you take a test?" and "What does your teacher tell you before you take a test?" At all grade levels, the children see tests as originating with actions from the classroom teacher. The teacher verbalizes commands indicating a test is about to occur. The students respond to these instructions with the awareness that an event called a "test" is about to take place. The commands leading up to actually taking a test, as well as those during the test, constitute the information which the child uses to define the parameters of the event of testing.

In general, a consistent set of responses emerged from all three grades when students were asked, "Can you describe what happens when you take a test?" or "What does your teacher tell you before you take a test?" At all levels students responded with the technical or explicit rules they had learned surrounding test taking. These rules were the proper test-taking rules demanded by the teachers. Responses at all three grade levels included rules for proper set up of the test paper with name, date, and number; and rules against cheating, copying other students' papers, talking, and excessive body movements. Examples of these rules were explained with such responses as: "He tells us to be quiet and look at our own papers and don't copy"; "Sit down quietly. Be quiet. Sit up straight"; and "Don't copy each other. Don't play. Don't write in your book." The consequences of not obeying the teacher-imposed rules had been learned by the time the students were at the third- and fourth-grade level with such responses as: "Don't look at somebody's paper. She might get mad. . .she might tear up your paper"; "If you're caught (cheating), he'll throw your paper away and give you an 'F'"! and "If you get talking you have your paper put in the trash." Not one student's response indicated that a teacher at any of the levels explained why the students were taking the test, encouragement that they should try to do a good job or that the test was important to the students to help them master the necessary classroom materials. Rather, according to the student responses, tests were presented by the teachers according to behaviors that were not permissible. The testing environment was perceived by the students as one in which there were certain appropriate physical behaviors and others that were not permissible.

C. What Makes a "Test" a "Test"?

The student is confronted with a variety of activities during the school day and must learn appropriate behaviors and the reasons behind them for each of these activities in order to function well within the classroom. As stated in the previous two sections, students progressively learn the rules surrounding taking a test from the second to fourth

grades and define a test according to the rules they have learned. The event of testing is, therefore, set apart or defined according to the behavior that is learned as appropriate to the test-taking situation. Students learn that appropriate behavior in one situation is not necessarily appropriate in another. They thus learn to segment or divide the classroom activities according to the rules learned surrounding that particular event or activity.

In order to see how students used these rules to define what was and was not a test, the researchers used pictures in the second set of interviews with the second-, third-, and fourth-grade students. The interview consisted of four pictures depicting Navajo students in a classroom setting (see Appendix A). Two of the pictures were close-ups of students working at their desks, using paper and pencil, and two were general classroom scense. Students were asked to talk about the pictures generally and then asked if the students or student in the two pictures could be taking a test.

When stating that the students depicted in the pictures were not taking tests, students at all grade levels used explanations indicating that proper test-taking behavior was being violated, and therefore the students in the pictures were not taking tests. Second-grade students indicated that the students in the pictures were not taking tests because of the size of their papers. At this grade level, with little exposure to standardized tests, the students' main knowledge of a test centered around the weekly in-class spelling test. This test was the only regular test at the second-grade level, and it always required the student to use a half sheet of paper. Therefore, in the minds of many second-grade students, if the student was working on a full-sized sheet of paper, he or she was not taking a test. During a classroom observation the researcher also encountered this rule for identification of a test. A group of students were returning to their seats after their reading session with the teacher. Each student was holding a sheet with questions from his or her reading session. One female was stopped with the paper in her hand and was asked, "Is this a test?" The student responded in a very definite manner, "No, no, it's a work sheet. A test is when the paper is half."

The rules of not talking and being quiet were also used in explaining why or why not the students in the pictures were taking tests. One second-grade student said the student was not taking a test because he was writing something and on a test you "listen to your teacher." The role of the teacher during test-taking also produced rules that defined the event of testing. A fourth-grade student indicated that the children were taking tests because, "The teacher is checking the paper."

The teacher's prohibition against looking at another student's paper-cheating or copying--was also a rule that was strongly associated among students with defining a test. One fourth-grade student indicated that the boys in the picture could not be taking a test because they were helping each other. Another fourth grader put it clearly by stating, "No, he's looking." During other activities the students were engaged in during the school day, assisting each other was not forbidden. It was only while doing something called a "test" that the students had learned that the behavior of helping another or looking on another's paper was strictly against the stated rules of the event.

Using the learned, proper test-taking rules to decide whether or not students depicted in the pictures were taking tests was an easier task for the student than responding to the researcher's direct question as to what was different between other classroom activities and a test. In general, there was confusion as to what did and did not constitute a test. Among the second- and third-grade students the content of the activity was not generally seen as a determining factor in assigning the label "test" to an activity. However, the fourth graders seemed to designate the difficulty of the activity as an indication that the event was a test, by responding that taking a test was harder and one got tired from the activity. At all three levels, the rules of being quiet and having to work by oneself without copying were mentioned as rules that separated a test from other classroom activities.

D. Are Tests Important?

Tests are seen as important assessment instruments by both teachers and school administrators. Teachers utilize tests as an objective measurement of the students' progress in the classroom and the school utilizes tests for an overall measurement of the students' progress in the school. However, in the definitions and descriptions of tests given by the students at all three grade levels, students did not indicate that a test was an important event in their schooling. Their discussions centered around the technical instructions given to them by their teachers. These instructions were the focal point in the students' attempts to define a test. In attempting to obtain the students' perceptions of the reasons behind the test-taking event, the researcher posed the questions, "Why do you take tests?" and "Are tests important?" to students at all three grade levels.

In summary, students at each grade level responded with a different understanding of the "why" surrounding the event of testing. The second graders were confused when trying

to explain why one activity they did in class, a test, was important. They sensed the event was different from other activities but were too young in their school experience to explain how testing would affect them in their schooling. However, by the end of the second grade, a few of the students were aware of the CTBS having to be taken before they could go to the next grade. The third-grade students were beginning to develop a clearer understanding of the use of tests in their school experience. Responses explaining the importance of tests were divided between learning things--words, going to the next grade, and the distinct rules that separate the event from other events in the classroom. By the time the students had reached the fourth grade, they had focused on another reason behind testing in their schooling. Testing was seen as an event that one had to go through in order to pass to the next grade. The teachers had instructed them that this was the case and they, therefore, attached the major importance for taking a test to promotion within the school. However, the school implicitly sees a test as a tool to determine what the student has learned in order to decide whether or not the student will be promoted. The students do not respond with this implicit understanding of why a test is taken--as a tool to assist in learning--but rather they respond to it as an event beyond their control which must be taken and passed for promotion. By the fourth grade the students had learned this lesson well.

E. Feelings Towards Tests

In asking how students develop an understanding of the event of testing, it is important to examine the attitudes the student has towards taking a test. The student's feelings towards taking a test can give insight into how the student is perceiving or valuing that event. The researcher asked the students interviewed at second-, third-, and fourth-grade levels to pretend that they were taking a test. The students were asked to close their eyes and think about how they felt just before they got ready to take a test. If the students had difficulty with this, the researcher probed further with, "Tell me how your body feels just before you are going to take a test." The researcher then asked the students how they felt after they had finished taking a test and, finally, if they liked tests. The students had no problem in responding to the questions and often even showed the researcher how their hand would shake or get tired or how their heads would feel "soft."

Second Grade

The attitudes or feelings towards taking a test varied considerably from the second to the fourth graders. The second graders, when asked how they felt about tests, con-

sistently responded that they felt good and/or happy when they took tests. A common response was, "Happy, because I like test, I like all my work." Only two students responded that they were unhappy when they took tests, stating, "Terrible, because I don't like tests"; and "Ugly." In general, at the second-grade level, students expressed little anxiety over taking tests and seemed to exhibit feelings of happiness before and after taking a test. Classroom observations of these students on both standardized and classroom tests support these interview findings. The students consistently seemed eager to take tests and did not appear apprehensive as test time approached. When asked if they studied for or worried about tests before taking them, students responded consistently that they did not.

In general, the second-grade students approached the event of testing in the classroom much as if they were playing a game. They smiled and appeared very eager to take tests. This excitement was observed among the "good" as well as the "marginal" students. The consequence of doing poorly on a test--not getting a 100% or a star--seemed to carry no repercussions for the student. In fact, tests were an opportunity, not a burden: the more frequently tests were given, the more chances a student had to obtain stars. Doing the test correctly did not seem to be the most important rule learned by these children, although they all knew that if they did succeed they would be rewarded with a star. If one lost such a "game", one could simply wait to try on the next one.

A parallel can be found among other student groups responding to tests as game-like events. Ralph Tyler at a National Institute of Education conference noted,

> Some children, particularly those from middle class homes, take formal test situations seriously and try to respond. Lower class children, on the other hand, usually come from backgrounds where tests are rare and they appear to be silly games. (Tyler, 1979)

These second-grade students saw tests as exciting games in which rewards in the form of stars were given to them if they played the game correctly and accurately. The implicit purpose of testing from the perspective of the teacher and the school--to learn what one did and did not know--did not seem to be part of the student's concept of a test at this grade and age level.

Third Grade

The responses of the third graders to, "How do you feel about tests?" were not as consistently positive as were those of the second graders. Although half of the students still indicated that they felt happy and good before taking tests, the other half indicated feelings of appre-

hension and worry over test-taking.

Observations of classroom testing situations at the third-grade level revealed a mixed set of reactions and responses from the students. As would be expected from the students' statements concerning their feelings towards tests, some students seemed confident and calm as the test time approached while others approached the test with apprehension and open nervousness. The verbal exclamations and open enthusiasm, present when the second graders took a test, was missing from the class as a whole, although some students were quick to sharpen their pencils and prepare to take the test. Very little talking took place among the students, although many of the girls glanced and smiled widely at each other.

In general, the third-grade students were split in their expressed feelings towards tests. Half of the students expressed happy feelings before and after taking tests and said that they enjoyed taking them. The rest of the students expressed nervousness and anxiety before taking a test and were happy and relieved afterwards; as one student stated, "Because I'm finished with it." These students said they did not like taking tests because they were difficult and "'Cause it's hard to get stars." The third-grade students were beginning to see a test not simply as an event that was different from other activities undertaken within the classroom but one that was also often more difficult that other activities in which they normally engaged. The rewards, in the form of stars, were not so easily obtainable, possibly due to the increased difficulty of the test content. The students, although exhibiting an increased anxiety towards testing, still seemed to see the testing event as an activity whose consequences were limited to stars next to one's name on the classroom chart. They did not seem to attach a measure of self-worth or achievement to performance on tests.

Fourth Grade

In general, the responses of the fourth graders to the question, "How do you feel about tests?" indicated nervous, unhappy feelings. Student responses included: "My body feels like I'm scared. I want to run away from school. And I. . .when I take a test, and I feel like I'm gonna tear the book"; It feels like kinda tickely and nervous"; and "Your hands are shaking, and my body is always shaking. Sometimes I feel soft." Students at the fourth-grade level have developed an apprehension and concern about test-taking that they attribute to a fear of doing poorly and of not passing to the next grade.

The observations of test-taking in the fourth grade revealed a much more serious approach than to test-taking in either the second or third grades. Students were observed

to be actively working with each other in studying for the test before actually taking it. Some students sat alone at their chairs quietly reviewing. Others worked in pairs at the blackboard. Although there was excitement among some students as they studied together, the "reward" they seemed to be striving for was "passing the grade" rather than getting stars or tokens, although tokens were also gained and enjoyed by some students. During the testing situations observed, the students were very quiet, with little body movement and very little smiling or eye contact with each other.

It appears that students at this grade level have redefined tests, from "games" to be enjoyed and looked forward to, to events that must not only be tolerated or attempted but passed successfully. Failure on tests means failure to move to the next grade. Students might still not have a personal attachment to identifying a "100%" as a measure of their own worth or importance, but they seek to move upward with their friends in their school experience. Progressing through school with one's classmates seems to be an important new incentive for performing successfully on tests.

At the fourth-grade level an in-class test is still an event in which a student can acquire awards in the form of tokens. However, in the minds of the students, the word "test" is more clearly tied to an event, particularly the CTBS, which the student has to successfully complete in order for promotion to the next grade. This concept or understanding of the connection between a test and promotion seems to have increased the level of anxiety and apprehension in the minds of the students as they approached the event of a test.

F. Projections: Feelings From Pictures

In addition to asking the students how they felt about tests in a rather structured interview, the researchers used a projection technique with pictures to verify the interview statements (see Appendix A). Four pictures with Navajo children working in classrooms were shown to the students. The students were asked to talk about the pictures in general and then asked particular questions centering around tests. Students at all three grade levels were asked how the children depicted in the pictures would be feeling if they were taking a test and then how they themselves would feel if they were the student in the picture.

Overall, the responses of the second, third and fourth graders to the projection exercise were similar to the responses the students had previously expressed in interviews with the researcher. This similarity reinforces the validity of the students' responses and gives more credibility to the assumption that the students responded with their actual feelings, rather than responding with what they assumed the researcher wanted to hear. This also re-

inforces the general pattern that had emerged in the previous interview: the second-grade students expressing feelings of happiness and comfort with tests, the third graders starting to develop mixed feelings towards tests, and the fourth graders expressing discomfort and unhappiness when confronted with tests.

G. Teacher Perceptions of Student Responses to Tests

The previous two sections described the students' feelings surrounding the testing event. In this section the students' feelings during test taking are described by the teachers who give these students tests. All of the teachers and teacher aides were asked to describe their students' behavior during test-taking. The second-, third-, and fourth-grade teachers generally reported that their students expressed excitement, anxiety, and nervousness when taking tests, whereas the teachers in the upper-grade levels felt their students were generally unexpressive and apathetic when taking tests.

The second grade teacher indicated a total lack of student test anxiety among his students during test-taking. Excitement was the main feeling expressed by his students: "I think it's like horses at the gate, ready for the gate to open for the race to start." He felt the class was very competitive and enjoyed, even looked forward to, taking a classroom test. The use of rewards, giving the students colored stars, seemed to be a key factor in the students' enthusiasm. According to the teacher: "On the arithmetic (math test) they are just a little bit more excited than the spelling test but it's gotten to be quite a thing to get a red star upon that chart." Student interviews verified this observation, frequently mentioning the number of stars they had acquired on the spelling chart. Some students identified a test as an event in which, "You get stars, lots of stars." Students were frequently observed in front of the class spelling chart, counting and comparing names and stars acquired.

The third-grade teacher felt her students expressed little test anxiety but also little open enthusiasm as did the second-grade students. She recalled, "They don't get upset or anything, it doesn't faze them at all. For the weekly spelling test there is no anxiety. No point where they have even tried to cheat."

The fourth-grade teacher felt his students generally tried to do a good job on tests. Therefore, he found the feeling of frustration and anxiety prevalent during test taking: "Some of the kids will be twisting their hair, maybe concentrate, get frustrated. They start tugging on their hairs and twisting their hair, or I have a couple, when they get frustrated, they start making mouth noises." When faced with the standardized CTBS, he felt the majority of his students were not really thinking about what the items were saying but rather were probably thinking, "I

hope I can fill in all of the ovals correctly so I can finish this and put my pencil down."

The upper-grade level teachers all expressed the statement that the students did not seem anxious about tests but rather that there was a general feeling of apathy among them towards tests and schooling. In describing the emotional feelings in his classroom during testing, one of these teachers said, "There is no heights of joy or depths of depressions when it comes to quizzes. They take the test, they give it to me. There isn't any frustration or anything like this." This description was repeated by all of the upper-grade level teachers when describing their students taking tests.

In general, the teachers descriptions of the students' feelings when taking tests matched the students' expressed feelings at the second-, third- and fourth grade levels. The second-grade teacher described excitement among his students; the third-grade teacher felt her students expressed mixed emotions when confronted with tests; and the fourth-grade teacher felt frustration and anxiety was prevalent among his students during testing. Although the teachers described the students feelings correctly according to the students expressed statements, the "why" behind these emotions were clearly different between these two groups. The teachers see the students lack of seriousness when taking a test as being tied to a general apathy and lack of concern towards school. The students, however, expressed appropriate emotional responses according to their understanding of the testing event. The younger students, responding to their model of tests as games, expressed excitement during test-taking. As the older students became aware of the seriousness of tests as evaluation instruments they developed anxious feelings when confronted with taking a test. The upper-grade level students, who were described by the teachers as apathetic, seemed to realize their test failure and responded by an outward lack of expression as a defense against a highly frustrating and uncomfortable situation.

H. Students' Models of the Testing Event

Presented in this chapter was the "image" of testing in the minds of the Navajo students at Red Canyon. This "image" creates a model that justifies and explains the attitudes and behaviors these students exhibit when approaching the event of testing.

When the second-grade students are presented with a test by their teacher, they are facing an event that is new to them in their schooling experience. Their understanding of the event comes from the information presented to them

by their classroom teacher. The teacher presents classroom testing to these students in a game-like atmosphere which is surrounded by procedural and physical behavior rules. The students, therefore, learn that a test is an event that requires appropriate physical behavior: no talking, no cheating, and no bodily movement. They also learn that a test is a game in which the students can obtain rewards, in the form of stars or tokens, if they play the game correctly. To the students, playing the game correctly means following the proper teacher-directed rules. The students learn to carefully cover their papers while taking a test. They also learn that looking on another student's paper or talking while taking a test will result in losing their papers and therefore "failing" the game. The students enjoy playing the game and attempt to carefully follow the rules surrounding taking a test. They approach test-taking with open enthusiasm, manifested in rapid hand-rising, smiling, quickly removing materials from their desks, and sharpening their pencils. Observations already cited show that the students become very eager when test time approaches, looking forward to acquiring additional stars and tokens.

As students enter the third grade, they continue with the model of the testing event as a game. Although the students are faced with a new teacher, the basic rules they have learned in the second grade serve them as a guide to exhibiting the proper physical behaviors to satisfy their new teacher. The testing event is still presented to the students as a game, surrounded by behavioral rules, which results in stars and tokens if successfully played.

By the time the students have reached the fourth grade, however, they learn that their model, a test as a game, is not adequate. They can still perform the proper physical behaviors while taking a test, but the students realize the content of the test, rather than simply performing the test, is the crucial factor in succeeding on it. The students realize the seriousness of the testing event for grade promotion with failure to perform adequately on a test resulting in not simply fewer stars or tokens but retention in the same grade. The model that had served them well previously--tests as games--is no longer adequate. Therefore, they must develop another model--tests as an event for promotion--when they will utilize throughout the rest of their schooling.

It seems clear that the students at Red Canyon do not enter the classroom and function with the same "image," or ideal-typical model of testing, that is operational with the teachers and school administration. The students do exhibit the correct physical behaviors to satisfy the teacher; however, the model of what a test is and why one must take tests does not match the ideal-typical model with which the teachers and school function.

CHAPTER V

STUDENTS AND TEACHERS: AN ANALYSIS OF THE TESTING EVENT

The previous chapters have presented a description of tests and testing situations among Navajo students in one BIA school. The processes involved in student testing are described by information concerning student feelings, definitions, and concepts of tests and by the teachers' own perceptions of tests and testing. The information which students receive in the classroom is used by them to formulate a model of the testing event which they then use to understand and act appropriately during tests. The teachers also act within a model of the testing event which they, in turn, utilize when presenting tests to their students. It appears from the data gathered in this study that the teachers and many of the students function within the classroom with distinct and different "images" or models of testing. This chapter analyzes the "how" and "why" of these different models of the testing event at Red Canyon.

A. The Student and the "Postural Diagram"

The research data indicates that the students at Red Canyon do not share their teachers "ideal-typical" model of testing and enter their school experience with little understanding of the general ramifications of schooling and the particular significance of testing. The student starting school at Red Canyon is confronted with a totally new institution which seems to lack a place in the student's "postural diagram" (Fortes, 1938). Perhaps more appropriately stated, the student's "postural diagram" is directed differently, with different information than that for the imaginary student in the ideal-typical model. The concept of a "postural diagram" was formulated by Fortes in examining the education of children from Taleland. He indicated that the educational development of a child was not in the form of isolated bit-by-bit parts that added up to a total pattern during a child's life. He suggested that the learning was instead presented to a child as a series of "schemas" from the beginning which served as skeletons or general outlines that the child "filled in" during his or her development. These "schemas" formulated a child's postural diagram that he or she functioned with throughout the developmental process. In Fortes' words:

> My observations suggest that the course of development is somewhat as follows: at first the child acquires a well-defined interest associated with a postural diagram of the total pattern. The postural diagram is, as it were, a contour map, extremely simplified and crude but comprehending the essential elements and relations of the full pattern. Further experience strengthens and amplifies the interest

> at the same time as it causes the details of the postural diagram to be filled out, making it more and more adaptable and controllable, producing more discriminatory responses to real situations, and linking it up with other patterns of behaviour and with norms of observance. The total pattern is not built up brick by brick, like a house, but evolves from the embryonic form. (Fortes, 1938, p. 52)

A child representing the ideal-typical teachers' model would have a postural diagram that is clearly different from that of most of the children at Red Canyon. This child might enter school with a general awareness that this experience would be necessary and important and would somehow fit into his or her future. The child might not know or be able to verbalize why school is important but nevertheless the entire schema of schooling is not questioned. As the child learns more about the institution of schooling, he or she is confronted with the classroom test. This event is added to the student's postural diagram as the full pattern develops. It is useful here to parallel the information in a student's postural diagram with Edward T. Hall's (1959) "formal level" of understanding, which is explained in detail further on in this chapter. Ideally, the child starts with the formal level information--his or her postural diagram--which is then "filled in" or developed with additional information at the informal or technical level.

The student enters school at Red Canyon with a postural diagram that may lack an understanding of the significance of schooling and testing. As the student progresses in school, he or she develops an understanding of school and events in the classroom according to the information he or she receives from the teacher. The school and teachers assume the students share their postural diagram or formal understanding and, therefore, present only technical information to the students to assist them in "filling in" their postural diagram of schooling. However, this information, rather than functioning as "fill-in" to the students' existing postural diagram, is used by the students to develop their own postural diagram with which to ultimately understand the events they confront in the classroom.

Students at Red Canyon are first confronted with standardized tests in the second grade. As they have not experienced formalized testing and classroom testing before this time, they are presented with the necessary information with which to define this new experience, the testing event, by their teacher. As indicated in the student and teacher interviews, the students in the lower elementary are presented with technical level information to delineate a test from other classroom activities. The child learns that a test, "is when the paper is in half and you put the words from the

board and listen to the teacher, and do the work he says. You listen to him and write them." Second and third graders' definitions of a test also center on descriptions of placement of desks during tests, location of test materials on the various classroom blackboards, and on the teacher as the individual one must listen to during a test. These rules are used by the students to define a test as a separate event occurring in their classroom.

The lack of any responses defining a test as an instrument for learning or promotion indicates the absence of any formal understanding of the significance of testing in the teachers' model at both these grade levels. This information is not part of the students' postural diagram, although the teachers function on the assumption that the students possess this knowledge. The second-grade teacher's presentation of a test is not unlike that of the other lower elementary teachers.

> Number your papers one to ten. This is a test. This means you are not to look on someone else's paper. Keep your hands on your paper. If [the aide] sees anyone looking at another paper we will take your paper and tear it up and throw it away in the wastepaper basket.

Absent from the teacher's classroom presentation of tests is any information which might enable the child to define and understand tests other than with technical test-taking rules.

B. The Ideal-Typical Model and Hall's Model of Culture

Human behavior is often examined according to a bipolar analysis of events. An action may therefore be seen as implicit or explicit, overt or covert, conscious or unconscious. The work of Edward T. Hall (1959) proposes a theory of culture that has three levels: formal, informal, and technical. According to Hall, man has not two, but three modes of behavior. "Taken at any given point, culture seems to be made up of formal behavior patterns that constitute a core around which there are certain informal adaptations. The core is also supported by a series of technical props" (p. 91).

By utilizing Hall's model of culture, the process of learning the "ideal-typical" model of testing can be illustrated.

> The formal is a two-way process. The learner tries, makes a mistake, is corrected ("No, not the right side of the horse, the left side! Remember, never approach a horse from the right!") Formal learning tends to be suffused with emotion. Informal learning is largely a matter of the learner picking others as models. Sometimes this is done deliberately, but most

> commonly it occurs out-of-awareness. In most cases the model does not take part in this process except as an object of imitation Technical learning moves in the other direction. The knowledge rests with the teacher. His skill is a function of his knowledge and his analytic ability. In real life one finds a little of all three in almost any learning situation. One type, however, will always dominate. (Hall, 1959, p. 72)

In Hall's model, the formal level system is taught to a child by an adult mentor. The adult, and general cultural and institutional pressures, mold the child according to established patterns that he or she does not question. A child might be corrected, "Boys, don't do that," or "You can't do that," in a tone of voice indicating that what the child is doing is unthinkable. The adult is teaching the child the formal rules of the situation. These are not questioned by the adult mentor and are passed on to the child as "the way it is." The development of the "ideal-typical" model of a test starts on this formal level. For the adult, tests have been an integral and important part of his or her own schooling and must be equally important in the child's life. Tests are a regular and consistent activity associated with schooling. Everyone must become schooled and everyone must also take tests. One does not question a formal system and therefore an adult might simply say to a child, "Tests are important. You must take them." In some families this lesson might be incorporated in pre-school rearing along with the importance and inevitability of schooling in general. In other families this information might not be a part of the child's "formal level" learning and thus be left out of the child's pre-school rearing.

On Hall's informal level of learning, the principal agent is a model used for imitation. Groups of related activities are learned by the child at a time, often without the knowledge that they are being learned or that there are patterns or rules governing them. A child might be puzzled and ask a question seeking rules of an activity or event and receive a response such as, "Look around you and see what people are doing. Use your eyes!" The child learns that the information he or she is seeking can be obtained by observing and imitating the actions of models. In the case of testing, the child learns proper test-taking behavior by imitating the models surrounding him or her while taking the test. Teachers vary in their classroom rules of proper test-taking behavior. A child entering a new classroom for the first time and taking a test in this new environment can observe the other children and informally learn the proper test-taking behavior for this particular teacher by using the other students as models. Children learn that they must be quiet while

taking a test, sit still in their seats, and sit up straight. Children, informally, learn how to protect their papers from "cheaters" by covering up their papers with their free hand or arm. Children can look around their classroom and observe other children covering their papers and imitate this physical action.

According to Hall, technical level learning is transmitted explicitly from the teacher to the child, either orally or in written form. Unlike informal level learning, which depends on selection of adequate models, technical level learning is explicitly presented to the learner in the form of an outline of behavior or concrete rules which are to be followed. In testing situations, the teacher will instruct the students in a series of steps as to what is to be done during a test. Explanations for preparing the test paper properly will be given to the students as they organize themselves for the test. These instructions might include putting their names on their papers and numbering the paper for the words to be given on the test. A teacher instructs the children to prepare for a test by removing everything from their desks, sharpening their pencils, not talking, and not cheating. The teacher might also tell the children to try to do their best.

The ideal-typical model of testing, utilizing Hall's levels of learning, can be seen to develop in a student's mind as he or she progresses in school. On the formal level, the student enters school with an understanding and acceptance of the general importance of schooling and the particular importance of testing. The student, through modeling on the informal level and teacher instructions on the technical level, then learns much of the proper physical behavior one must exhibit during test-taking.

Hall's model of culture, containing the three levels of human activity--formal, informal and technical--when applied within the ideal-typical model to schooling in general and testing in particular, reveals a paradoxical twist regarding the learning of tests. If the children of this study were to act within the teachers' ideal-typical model, they would enter the school with a formal understanding of a test and testing and would then learn additional information regarding tests informally and technically. However, the children in Red Canyon do not enter the classroom with the same formal level understanding of tests as in the ideal-typical model or as is operational with the teachers and the administration of the school. The teachers and the school unquestioningly accept the importance of the evaluation definition of tests and assume that the children share this same understanding. The results of interviews and observations indicate that this understanding does not develop until the child's fourth or fifth year in school.

When children at the second-, third-, and fourth-grade levels were asked to define tests and if tests were important, the younger children responded with technical and informal level knowledge as to the actual behavior one must exhibit during a test, rather than expressing any understanding of the purpose of testing in school. In general, second-grade responses to defining a "test" centered on vague descriptions of placement of desks during tests, location of test materials on the various classroom blackboards, and on the teacher as the individual one must listen to during a test.

The third-grade students were more able to articulate what actually occurred while taking a test than the second graders, indicating that they were learning more clearly the rules surrounding proper test-taking behavior. These rules were used by the students to define a test as a separate event which took place in their classroom. Responses from the third graders, however, still revealed a technical level understanding of tests and testing, but the model this technical understanding pertained to was one of tests as a game. These students did not seem to exhibit an understanding of tests as evaluation measures as one would assume if the ideal-typical model of testing were in operation at Red Canyon.

The responses of the fourth graders to the question, "Can you tell me what a test is?" centered around the consequences or promotion aspect of a test versus a description of what took place during test-taking. Very few students described the testing event in terms of "rules" or proper behavior, as did the second and third graders, but rather expressed an awareness of the importance of tests for promotion. Testing was now defined as something one must undergo in order to pass to the next grade. This is evidence of a clearer understanding of the teachers' model of testing. The teachers instruct the students as to this new model of testing, tests as avenues for grade promotion, and by the fourth grade, most students have learned this information.

These fourth-grade students' exposure to testing situations and their consequences have begun to lead them to define tests narrowly in terms of a standardized test and grade promotion. Although these students do acknowledge some events in the daily classroom as tests, their major identification with the word "test" is clearly linked to the CTBS. Although most of the fourth graders still exhibit technical or procedural level understanding of tests and testing, a few of the students respond with a formal level understanding that would match the teachers' ideal-typical model. These students state that a test is something which is taken in order to help you learn what you do or do not know: "It helps you learn"; "To learn what is a work, and to learn"; "You have to learn and then take a test"; and "Your teacher

gives you a test to learn." In general, most of the fourth-grade students have developed a formal level understanding of testing which is appropriate according to their own model of tests in their school situation--tests as events for promotion--although this still does not match with the formal level understanding of tests within the ideal-typical model that their teachers implicitly function with--tests as devices for learning and avenues for future success.

Throughout this report, Hall's concepts of formal, informal, and technical learning; Fortes's postural diagram; and Weber's "ideal-typical" model have been referred to repeatedly. The value of these ideas in explaining the phenomenon of testing among the Navajo students at Red Canyon cannot be overstated. The concepts of Hall, Fortes, and Weber illustrate the plight of these children and their teachers. Both groups function within the classroom and approach the testing event with different and distinct levels of understanding, postural diagrams, and/or test images. This results in a misrepresentation and misunderstanding of the event of testing: the teachers continue to function with the assumptions that their students share their models and understanding of testing; the students assume they have received the appropriate understanding of a test from their teachers, which they have used to formulate their models of testing.

C. Feelings and Tests

In the ideal-typical model, the student exhibits some emotional anxiety when confronted with the testing event. The student perceives the test as an important event and tries to perform adequately on the test. As not all students conform to this model, the degree of test anxiety varies from student to student and among different cultural and economic groups.

The attitudes or feelings towards taking a test vary considerably at Red Canyon from the second to the fourth graders. The second-grade students express little anxiety over taking tests and seem to exhibit feelings of happiness before and after taking a test. The students are observed to consistently approach test-taking eagerly and do not appear apprehensive as test time approaches. The atmosphere surrounding a testing event at the second-grade level is one of excitement, much as if the students are playing a game.

These second-grade students see tests as exciting games in which rewards in the form of stars are given to them if they play the game correctly and accurately. Their expressed feelings lack any measure of anxiety. This might be connected to the lack of formal understanding of the teachers' models of tests and testing among these students. The implicit purpose of testing from the perspective of the teachers and the school--to learn what one knows and does not know--does not seem to be part of the students' concept of a test at this grade and age level. The consequence of doing poorly on a

test seems to carry no personal repercussions for the student other than not gaining more stars or tokens. If the child shared the teacher's or school's formal understanding of tests he or she might, therefore, be expected to exhibit a measure of test anxiety. The children at this level have not developed a formal understanding of tests and therefore approach the testing event with an absence of emotional anxiety or nervousness.

As the students at Red Canyon move up in grade level and out of the self-contained classrooms of the lower elementary, the presentation of the testing event reverses. Tests are presented to the students as a serious activity whose only reward is in the form of good grades. By this time the students clearly understand that grade promotion is linked to adequate test performance and this realization constitutes their formal understanding of the testing event. Verbal and physical anxiety when approaching a test increases among these students. As anxiety increases, the students exhibit an increased frustration with any serious attempt to perform adequately on tests.

Students at all grade levels are told that the CTBS is a very important test which will be used to determine promotion. The younger students, however, seem to have difficulty accepting this testing event as different from classroon testing events which have been presented to them in a game-like environment. The younger students are observed to finish the CTBS very quickly with no visible anxiety but rather with an attitude of boredom or disinterest. These younger students seem to merely endure the event with little seriousness and the knowledge that they will not be getting tokens or rewards when finishing the test.

The older students approach the CTBS with a clear understanding that this event will determine whether they are promoted to the next grade. The frustration of continual test failure is evident among these students with verbal and physical anxiety and nervousness. "Blank" looks of accepted test failure and shaking hands are observed among these students. Although these students more clearly understand the importance of tests than the second-, third-, and fourth-grade students, and therefore try to approach the test seriously, their efforts seem futile. As indicated on the chart on page 49, at the eighth-grade level the median grade level on the total test battery of the CTBS is 3.8, or four years and two months behind the expected grade level.

Fryan's (1979) research showed that, among the younger grade levels, Orientals and whites had more test anxiety and scored academically higher than Blacks, Hispanics, or American Indians. As the students progressed in school, the situation reversed, with the white students maintaining the highest academic level with a lower test anxiety, while the Native American students exhibited the highest test anxiety and the lowest

academic achievement. It therefore seems that higher test anxiety--a measure of taking a test seriously--contributes to early academic success which, in turn, breeds further academic success with lowered test anxiety. In the situation of the Navajo students at Red Canyon, a lack of understanding of the seriousness of tests causes little test anxiety in the younger students which, in turn, could be resulting in depressed academic achievement. By the time the student realizes the seriousness of testing, he or she is already academically behind and feels frustrated and helpless when trying to "catch up" and perform adequately on tests. The chart on the following page illustrates the testing situation of the students at Red Canyon.

The Event of Testing and the Navajo Student
From Red Canyon

Grade Level	Hall's Level of Learning	Feelings	Testing Environment In-class	Testing Environment CTBS	CTBS Median Grade Level
Second	Technical/ Informal	No verbal or visible anxiety	Game-like, rewards, much excitement	Quiet, students finish quickly, seem bored, no visible anxiety	1.3
Third	Technical/ Informal	Some verbal and visible anxiety	Game-like, rewards, mixed excitement	Quiet, students finish quickly, seem bored, no visible anxiety	1.8
Fourth	Technical/ Informal, some Formal	Test anxiety evident, serious test attempts	Game-like, rewards, quiet, serious attempts by some	Quiet, students finish quickly, serious concentration, anxiety evident in increased body movement	3.5
Fifth	Formal	Increased verbal anxiety, lack of serious attempts, no visible anxiety in body	Test presented seriously, no rewards, quiet, finish test quickly	Quiet, students finish quickly, mixed anxiety and nervousness among students	3.1
Sixth	Formal				4.9
Seventh	Formal	Verbal expressed anxiety, feelings of helplessness, lack of serious attempt on tests, seems pointless	Tests presented seriously, no rewards, quiet, finish test quickly	Quiet, students finish quickly, verbal and visible anxiety among all students	3.7
Eighth	Formal				3.8

D. Students' Models of the Testing Event

It has been shown that the students at Red Canyon do not share their teachers ideal-typical model of tests. However, the students function in their classrooms, not in a void, but with their own models of the testing event. Even though their models are different from the teachers' models they constitute real and valid models resulting from their understanding of tests and testing. The following section describes the students' models of the testing event.

When children enter the classroom in the second grade, they encounter many different activities, which they respond to with differing degrees of interest. Some students take a greater interest in reading than math, while others like art more than spelling. Slowly, throughout a student's continued school experience, he or she will develop "favorite" subjects as well as subjects he or she will try to avoid. Regardless of the subject, however, there is one event in the student's school experience to which each and every child eventually learns to respond in the same manner--with respect, seriousness, and individual self-interest--the classroom test and, ultimately, the school's standardized test. The importance of a "test" in one's school experience does not necessarily develop naturally, as does the importance of reading, for example, but must be taught implicitly or explicitly to the child by his or her teacher. Following the ideal-typical model, some children enter their school experience with a previous knowledge of the importance of tests and testing in school taught to them by their parents or possibly older brothers or sisters. These students come to school with the advantage of having already learned a valuable lesson, either through verbal instruction on the importance of school and tests or by having experienced "test-like" situations in their environment in pre-school years. For the child that does not have this understanding of tests, learning the importance of tests as a measure of success in schooling is a crucial and often difficult task.

The research data indicate the children at Red Canyon do not enter school with a formal understanding of the importance of school in general and testing in particular. The student progresses in his or her understanding of tests, thereby creating a functional model of the testing event, with the information they receive from their classroom teacher. The younger students learn from their teachers that a test is an event not unlike a game. There are certain rules the students must obey when playing the game: no talking, no cheating, and no general bodily movement. These technical rules are explicitly taught to the students by their classroom teachers, who also frequently warn them that they will lose the game, by having their papers torn up, if they violate the stated rules. The incentive for playing the game--taking the test--is in the form of stars or tokens.

These rewards appear on the test papers, along with the student's grade, in an apparent attempt by the teachers to give equal importance to the grade as a reward. The teachers' use of extrinsic rewards--stars or tokens--appears to be an attempt to help the students develop intrinsic or internalized motivation towards test-taking. The students, however, seem to have a mixed understanding of the grades on their papers and only understand the star or token as the reward they receive for successfully taking the test.

Teachers often complain that the students do not "treasure" their graded papers. Within these younger students' model of testing, the product of the event that is important is the reward--the star or tokens--rather than the graded paper itself. If the students had a formal understanding of testing that more clearly matched that of the teachers, they might see the grade, in itself, as an important product of testing. However, within these students' model, the grade as the desired end product is at best secondary to the reward of stars or tokens as desired end products from testing. This also might explain the students' apparent disinterest when receiving their school report cards. The teachers complain that the students "don't care" about their grades and simply receive their report cards without interest or enthusiasm. The institutional format of the report cards, void of any stars or embellishments, might seem very unimportant to the students. Within these students' model of testing it is the stars, tokens, or other embellishments that are important, not the grade one must obtain in order to receive that award. Therefore, the students' careless handling of their papers and their lack of concern over grades might be seen as not fitting into what is important according to their model of testing.

The observed atmosphere surrounding the testing event among the younger students is one of excitement. These students approach tests eagerly with little visible concern or anxiety. Within the younger students' model, failure on a test is limited to failure to obtain additional stars or tokens. They do not see test failure as personal failure, other than that they might have fewer stars than their peers. The students do not have a formal understanding of the testing event that includes the long-range importance of successful test performance.

It is not until the students reach the fourth, and sometimes fifth grades, that they realize their game model of the testing event is inadequate. Although the teachers still present tokens or stars as a reward for testing, they also repeatedly emphasize to the students that a test is an event that is directly connected to promotion. The reward for successful test performance for the student, therefore, becomes promotion within the school. This does not match with the students' previous conceptions of why they have taken tests. The students are now faced with the seriousness of testing as a

mechanism for grade advancement. The model that has served them well previously--tests as games--is no longer functional within their new situation. The students are faced with developing a new model--tests as an event for promotion--which they must now utilize throughout the rest of their schooling. At this point observations indicate a change in attitude among the students as they try to adjust to their new model. Student test anxiety or concern increases. The students now realize the importance of the testing event as a personal assessment instrument. Student frustration is evident as the students recognize that the content of the test, rather than the actions they must perform (proper physical behaviors), is the most important aspect of taking a test.

E. The Teaching of Tests: Teacher's Models of the Testing Event

Teachers implicitly function with the ideal-typical model of testing as presented earlier in this study. The teachers see tests as an objective measurement of the students' progress in the classroom and as an instrument to give the students information as to what they have and have not learned in the classroom. Following the ideal model, the teachers feel the students should value school in general and tests in particular as processes they must go through in order to achieve success in later life. Although the teachers implicitly function with this "image" of the role of testing in school, the situation in which they find themselves seems to cause the teachers to explicitly develop and present other models of testing to their students within their classrooms.

The teachers seem to function on the assumption that the children do share their formal level understanding of the importance of tests. For the teachers' own educational and professional training, tests have been important instruments and, therefore, will be the same for their students. All the teachers admit that they themselves have felt anxious and nervous when faced with tests in their own lives. They feel that the students will also have this concern when taking a test.

When the teachers present a test to the students at Red Canyon they seem to be functioning within a dichotomy of testing models. On the one hand, the teachers accept the significance and importance of tests and therefore function within the ideal-typical model of testing. On the other hand, the teachers are faced with a class of Navajo students that they sense are "different." Relying on information they themselves have learned in their training as teachers, they try to adapt the testing situation to more appropriately meet the needs of their students. Popular psychology has taught them the use of operant conditioning which they utilize in the form of a reward system. With the knowledge that they have experienced test anxiety, the teachers try to alleviate any student anxiety by presenting the testing situation not as a serious activity,

but rather as a game-like event with which the students can be more relaxed. Rewards, in the form of stars or tokens, can be used to encourage the students to perform on the test and to make the event less stressful.

The teachers also seem to be using popular concepts about Native American students they have learned from the social sciences. The teachers see the children as non-competitive, expressionless or unemotional (blank-faced), present-oriented, unwilling to out-perform their peers, and coming from deprived homes. They therefore seem to expect less of the students because of their "Navajo culture." These views create a "vacuum ideology" in which the teachers can utilize social science data to rationalize their students' failure, rather than communicating with their students and possibly modifying classroom techniques. It must be emphasized that this is not an indictment against these teachers. The teachers are under tremendous professional and institutional pressures. They feel the standardized testing situation is unfair to their students and they are frustrated with their students' failure. They therefore utilize the only information available to them--their past knowledge acquired in teacher-training programs and popular educational and social science literature.

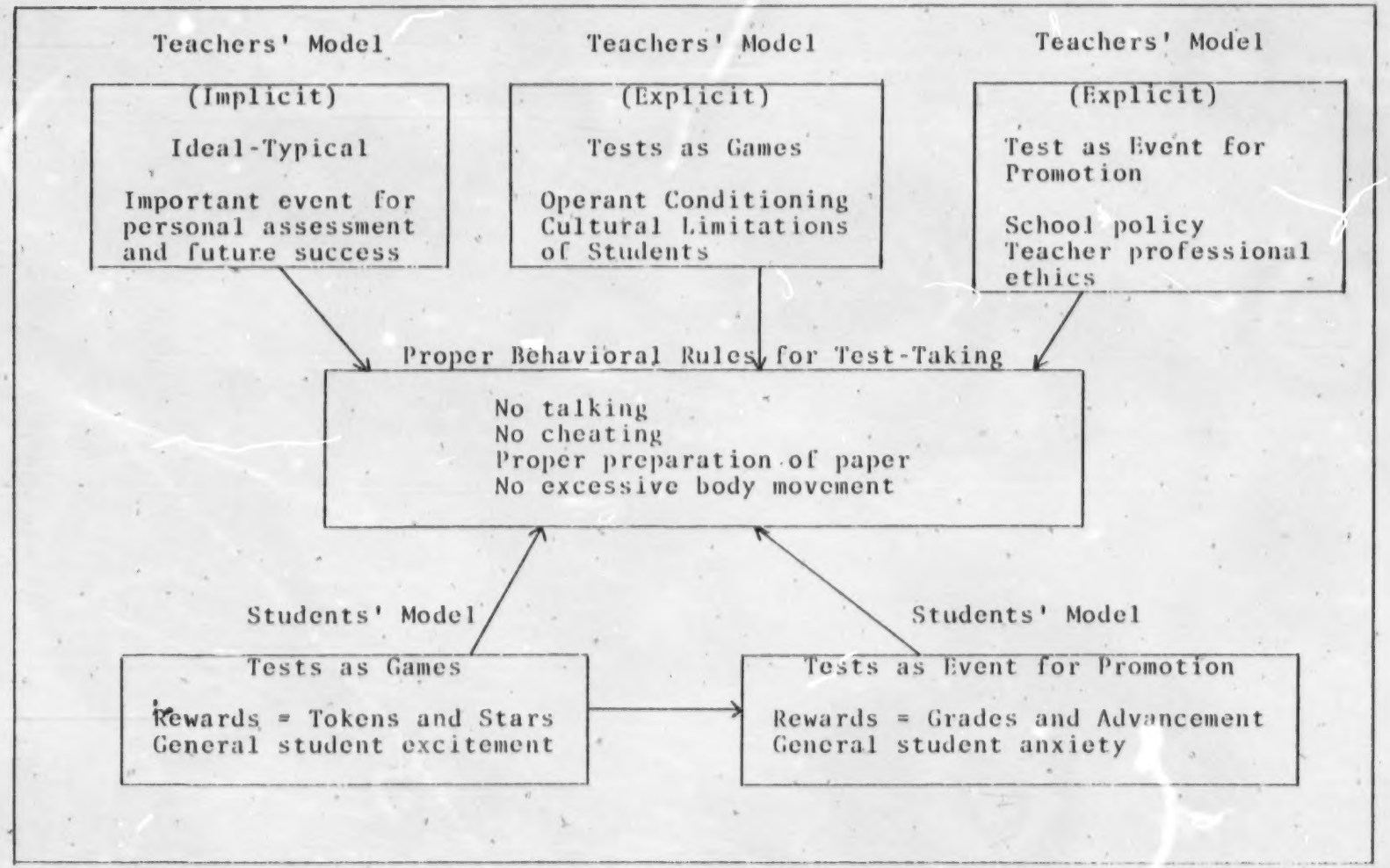
The dilemma the teachers are faced with causes them to create different models of test presentation. The need for survival in the classroom results in presentation of tests as game-like events. This does work well with the students; they are eager and enthusiastic when approaching tests. The students seem happy and even look forward to taking tests.

It is in regards to the school's standardized test, the CTBS, that the teachers are forced to change their model when presenting tests to the students. Teachers are under pressures for accountability by both the school in which they function and from their professional training as teachers. They must, therefore, present the CTBS as a serious assessment event to their students. The use of rewards the teacher can present to the students moves from stars and tokens to grade promotion. The teachers see a rise in student anxiety when facing tests and feel frustrated and helpless to alleviate the situation. The teachers in the upper grades see their students' test anxiety turn to frustration and ultimately apathy as their students realize the seriousness of tests and their lack of achievement on them.

F. Conclusions: Students and Teachers--Dichotomous Testing Models

The following chart illustrates the inter-relationship of student and teacher models of testing. It is important to note that the teachers and students in the lower-grade levels function in a complementary way although they have different models for the testing event. By presenting the proper

MODELS OF THE EVENT OF TESTING
AT RED CANYON



physical behavior, during testing, the students seem to satisfy many of the requirements of the teachers' model, although the understanding of the reasons behind testing are clearly different in both groups. It is not until the teachers have to change their model in the later grades, shifting the emphasis from form to content, along with the reality of failing presenting itself more strongly in the students' school life, that the students' model becomes dysfunctional. It appears that, if the teachers were not forced to change their model due to institutional and professional pressures, the students would proceed in their schooling experience with a model of testing that, although different in formal understanding, would nevertheless remain appropriate within the context of the classroom in which they were participants.

Some of the questions and implications that arise from this study are: Do Anglo children enter the classroom with more of a formal understanding of tests and their importance and does this in turn put them "ahead" of Navajo students in terms of success in schooling? Will other ethnic or socio-economic group children respond in a similar manner to the Navajo children, and, in turn, are these responses different from Anglo children's responses? This study has sought to generate a description of the attitudes and perceptions surrounding tests and the process of learning about testing among Navajo children. It is hoped that this research can then be expanded to examine other minority and socio-economic groups. This expanded research can then be used to produce a more global picture of perceptions and attitudinal development surrounding the process of testing in schooling.

Appendix A

Pictures used for projection exercise during student interviews. All pictures were taken by the researcher during observations in an all-Navajo boarding school in 1970.

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